

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 25, 1876.

ORIGINAL COMMUNICATIONS.

ON MATERNAL IMPRESSIONS AFFECTING THE FŒTUS.

BY WM. T. TAYLOR, M.D.

Read before the Philadelphia County Medical Society, April 26, 1876.

IT is the popular opinion that mental impressions which cause fear or anxiety to the mother, in the early months of pregnancy, can produce deformity, arrest the growth, or cause some injury to the fœtus.

Although this is disbelieved by many, yet we occasionally meet with cases so strange and unaccountable that we are obliged to give some credence to the opinions of mothers as to the cause of this abnormal condition of their offspring. If mental and moral qualities, physical peculiarities and habits, and even diseases, of parents, can be transmitted to their children, why cannot defects or abnormal conditions of the physical structure occur, and why cannot the formation of the fœtus be arrested during the developing stage, when the organs must necessarily be in a plastic condition? We do not understand the problem of life, nor can we explain the mysterious union between mind and matter, nor the physiological connection between the mother and babe in utero, that it should resemble one or other of the parents; therefore we must admit that there is some reason for this general belief, however unnatural it may seem.

It is said that many mothers are apprehensive during their pregnancy of some impending evil to themselves or their offspring, and may even be exposed to shocking sights, which produce *no* effect on the fœtus, for there is no nervous connection between the mother and her unborn babe; but all are not equally susceptible to such influences, therefore this proves nothing in the special cases which *cannot* be explained.

These unnatural conditions are supposed to be produced in the second or third month of utero-gestation, when the organs are in a state of formation and the spinal column yet undeveloped, so that a severe shock to the nervous system of the

mother might disturb or arrest the development of some part of the fœtus.

This theory of the influence of mental impressions on the pregnant female finds support in certain analogies observed among animals, as in the case mentioned in Genesis, chap. xxx., where Jacob caused the ewes of the flock to bring forth spotted and speckled lambs.

There is also on record the case of Lord Morton's mare of a chestnut color, which was covered in 1815 by a quagga,—a wild ass of the zebra species from Africa,—and after a pregnancy of eleven months and four days gave birth to a hybrid which strongly resembled the quagga. Subsequently, in 1817, 1818, and 1821 this mare was served by a black Arabian stallion, and produced successively three foals, all of which bore positive marks of the quagga, the first, however, in a higher degree than the third.

Instances, too, have occurred in which a negress has had a fruitful connection with a white man and all her other connections being with a negro, yet the offspring showed very decided traces of the white man.

My attention was directed to this subject from having met with the following case of spina bifida a few years since. Mrs. C., when in labor with her second child, after the head was born, felt and heard something burst during an expulsive pain, "like the explosion of an inflated paper bag," followed immediately by the delivery of the body. On my arrival, after removing the placenta, I perceived on the back of the child, in the lumbar region, the folded or collapsed walls of a cyst from two and a half to three inches in diameter, which had burst and evacuated its contents during delivery. It was partly covered with true skin, over the middle however of a red or livid hue, somewhat like a cancerous tumor, from which a bloody serum was oozing. On tracing down the vertebræ, there was some deficiency of the bony column under the cyst. A number of fibrous cords and vessels resembling veins sprang from the middle of this tumor. A ligature was applied around this mass, and it sloughed off; but the child became exhausted from the discharge, refused its food, had frequent convulsions, and died on the tenth day after its birth. The mother accounted

for this tumor from having been shocked during the second month of her pregnancy by one of her neighbors, who exhibited to her a tumor which had been removed from a friend's head a short time before, the sight of which so annoyed her as to make her feel quite sick. She remembers placing her hands on her back at the time, "because a chill ran through her backbone."

Several years ago a child was shown to me whose right hand had the appearance of having been amputated at the fingers, for it had four small rudimentary processes projecting from it, whilst the left hand was perfectly formed. The mother told me that in the early part of her pregnancy a beggar had presented himself to her, and thrusting forth his mutilated hand solicited charity, when she observed that it was devoid of fingers.

A young man came to me for professional advice whose hands were very much deformed, having only two long fingers and a thumb on each, with his forearms greatly shortened. His mother accounted for his deformity thus. When three months pregnant her husband took her to a theatre where the devil was personated in a hideous manner, with long claws, which greatly alarmed her.

A Mrs. S., when two months pregnant, saw a girl affected with strabismus whose face was covered with a mask; she was frightened at the time, and afterwards much annoyed, for the child's obliquity of vision was constantly before her. On the birth of her babe it was affected with strabismus, which still continues.

A friend of mine has a daughter with an apparent bruise on her face, which was caused by her mother having been alarmed during pregnancy at the falling of an older child, which bruised its face very seriously at the time.

A medical man told me that one of his children had a bare spot on its head, which his wife says arose from the circumstance that in the early months of her pregnancy she was frequently looking at the shining bald head of her father-in-law with an unaccountable delight.

An officer during the late war received a gunshot wound through the upper part of both thighs, which was dressed very assiduously by his wife, who was pregnant at the time. When their child was born, it had the appearance of cicatrices upon

its thighs similarly situated to those of its father.

I was informed by Dr. Garretson a few years since that he had operated on four children of one family for cleft palate, and that in each case the deformity was less than the preceding one; the fifth child having only a split in the uvula. The first-born was very seriously deformed, and the mother much worried in consequence; but during her second pregnancy the operation and healing process had so closed the cleft that the maternal impression was not so vivid or shocking, and with each succeeding pregnancy she was less impressed, so that at the fifth occurrence of utero-gestation she was rather favorably impressed with the success of the operation, and her babe showed scarcely a trace of malformation.

Last year I attended a young woman who died of valvular disease of the heart, and during her sickness she was very carefully nursed by a pregnant sister, who was much distressed by the sufferings of the invalid, for whom she had great affection. When her child was born it was smaller and more feeble than her other children at birth, had a slow circulation, a difficult respiration, and could scarcely cry. It had frequent attacks of dyspnoea approaching to asphyxia, with blueness of the skin, showing some abnormal arrangement of the heart or blood-vessels. It died when six months old, from a congestion of the lungs, but I was unable to obtain a post-mortem examination; yet it was certainly affected with cyanosis. Now, is it not probable that the suffering of the invalid had some effect on the fœtus of the pregnant sister?

On the 24th of last January I delivered a young married woman of her first child, upon the back of which, under the left scapula, was a "mouse-mark," caused by the mother having been often frightened by mice which she saw in her room during her pregnancy. So impressed was she with the idea, that she informed her nurse several weeks previous to her labor that the child would be marked. This mark is of a darker hue than the natural skin, and on one spot of a mouse color; nor does it require any stretch of the imagination to see the resemblance to or outline of a sitting mouse.

In 1846, a Dr. Jackson, of Boston, saw an infant with an extensive blood-mark on

one of its upper extremities, and the mother stated to him that when two and a half months pregnant she saw a man who had been killed on a railroad, with his arm twisted, partly torn from his body, and covered with blood. She nearly fainted at the sight, and could not banish it from her mind. When her child was born, the discoloration of the skin extended from the back of the hand up the arm towards the shoulder and somewhat on the neck, so that she was obliged to keep the child's arm always covered with a sleeve to hide the deformity.

Dr. Parker, of Virginia, relates a case of a lady who, when three months pregnant, saw a negro boy drive a pig through an inclosure which tore its bowels out on a stake of a fence, the sight of which so horrified her that when her child was born it had the entire front of the abdomen covered only by a thin film and the intestines visible through it. The child died soon after its birth.

In 1852, Dr. Storer, of Boston, reported a case of "arrest of development attributed by the mother to a fright during pregnancy." Three or four weeks after her marriage she was much affected at seeing a hen injured by a stone, thrown by a boy, which broke one of its legs and removed the lower portion. She was much troubled at the time, and, as her pregnancy advanced, continually dwelt upon the subject, insisting that her child would be deformed. When the child was born it was perfectly well formed in every part, except upon one of the lower extremities there was simply a heel and the rudiments of the five toes, at the end of which were placed microscopic nails.

In the June number of the *Medical Examiner* for 1852 a case is related of a lady who was greatly distressed during her pregnancy by a strange and unearthly noise, made by a cub-bear, which was confined in an outbuilding of a lot adjoining her residence. She fancied the noise resembled that made by her lunatic brother, who had been under her special charge for several years previous, but now an inmate of an asylum. She often saw the animal, and thought its cries were occasioned by a want of food. Her mind was constantly dwelling on the subject, and she could not control her feelings. When her child was born, its arms, legs, and back resembled somewhat those of the animal, and were

covered with fine hair of a dark brown color.

Many more instances might be brought forward if more attention was given to this subject, for cases occasionally occur in obstetric practice of which no record is kept, and the experience of many physicians would show that maternal impressions do sometimes affect the fœtus in the early months of utero-gestation.

1324 N. FIFTEENTH ST.

A CLAIM OF PRIORITY.

IN the issue of the *Philadelphia Medical Times* of June 10 is a letter from the New York correspondent, reporting a recent meeting of the Academy of Medicine in that city, in which he announces, with some emphasis, the discovery of a new principle of treatment for lateral curvature of the spine. He considers it especially noteworthy that the same practical result should have been arrived at by two observers, following entirely different methods of study. The occasion was the reading of a paper by Dr. A. B. Judson on the "Cause of the Rotation in Lateral Curvature," which was followed by confirmatory remarks from Professor Sayre. Without desiring to derogate in the least from the merit of Dr. Judson's patient analysis and admirably clear demonstration of the forces at work in the causation of rotation, which I consider to be an original and important contribution to our knowledge of this somewhat obscure problem, I wish to call attention to the fact that the practical results arrived at by both these gentlemen were given to the profession by myself a number of years since. The *Medical Gazette* of New York, for June 4, 1870, contains an article entitled "Idiopathic Lateral Curvature of the Spine.—Hints in regard to its Early Diagnosis, with a Description of an Improved Instrument for its Treatment. By Benjamin Lee, M.D. (Illustrated)." It is further stated by way of explanation that this paper is "the substance" of two others,—one read before the Section on Surgery and Anatomy of the American Medical Association, at its session at Washington, May, 1870; the other, extracted from the Transactions of the Medical Society of the State of Pennsylvania for the year 1869. The latter of the two contained both the

theses for which I now claim priority of publication. I adopt the plan of placing my own text in juxtaposition with that of your correspondent, not with the slightest intention of making any suggestion of borrowing, either conscious or unconscious, on the part of the gentlemen referred to, for both of whom I entertain the friendliest regards, but simply to render the similarity of the propositions more apparent.

They may be succinctly stated as follows:

1. That a very slight deviation of the line of the spinous processes towards the side of permanent curvature indicates a much more considerable deviation of the bodies of the vertebræ, which has existed for a much greater length of time. 2. That in its earliest stage the distortion of the spine bears a close analogy to that of posterior curvature, and that (a) reasoning and (b) experience combine to teach that the mode of treatment which is successful in the latter is also applicable to the former.

Times Correspondent.

On this occasion Dr. Judson read an admirable paper on the cause of the rotation invariably seen in lateral curvature (except in those rare cases due to intra-thoracic disease), in which, after referring in turn to a variety of explanations which had been offered by distinguished surgeons, both in this country and in Europe, and finding them unsatisfactory, he showed, on apparently well-founded grounds, that the rotation was really due to the fact that the anterior portion of the vertebral column has very few and slight ligamentous and muscular attachments, while the posterior part is secured in the most firm manner by numerous muscles, ligaments, and aponeuroses, which ordinarily keep the spinous processes in the median line. Furthermore, he proved that when rotation takes place, the vertebræ revolve on a remote axis (to make use of a geometrical expression), so that when we find the spinous processes deflected, to however small an extent, either to one side or the other, we may be sure that the anterior portions of the bodies of the vertebræ will incline to a much greater degree to the same side, since this part moves in the arc of a circle considerably larger than the posterior.

Dr. Lee.

The distortions arising from these and similar numerous and widely-differing causes, occupy various regions of the column according to their own seat and mode of operation, more or less expressive of those causes and presenting varying phases of deformity. It is not, however, to any of these forms of curvature that I desire now briefly to call your attention, but to that recognized by German writers under the name *scoliosis habitus*, signifying, not as might be claimed by some, a distortion dependent upon *habit* for its cause, but the habitual or usual form of scoliosis, which appears to me to be a sufficiently distinct and independent affection to entitle it to the prefix *idiopathic*, in distinction from those deviations which evidently depend upon extraneous causes.

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If we accept Mr. Adams' position, that rotation does precede any lateral yielding of the column, what will be the first alteration in surface form to which it will give rise, and by which we may detect its existence, and hence the imminence of the later stages of the deformity? Regarding the spine from behind, we may say that the bodies rotate in the direction of the curve to which they correspond, that is to say, in the dorsal region to the right, and in the lumbar region to the left. Now supposing the upper surface of a vertebral body to be a circle, and the axis of rotation to be the centre of the circle, it is obvious that to the same extent that any point upon its anterior circumference was displaced to-

Times Correspondent.

The practical conclusions, therefore, which Dr. Judson derived from his anatomical studies were, that lateral curvature is analogous to Pott's disease of the spine, for the reason that in both the anterior portions of the vertebræ are primarily and principally affected, and that it would be, therefore, philosophical to treat the former on the same principle which has proved so successful in the cure or relief of the latter, viz., the removal of all pressure from the anterior portion of the spinal column, and the throwing of the weight of the superincumbent parts of the body upon the posterior portion.

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ward the right, the opposite point on its posterior circumference would be displaced toward the left,—these points representing the extremities of a diameter. Farther it needs no demonstration to prove that if this diameter was projected beyond the circumference posteriorly, to a distance equal to its own length, the amount of displacement of its extremity would be materially increased.

The end of a spinous process occupies the position of the extremity of this prolonged diameter—supposing it to be the direct anterior-posterior diameter.

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The general belief has been that rotation came on rather late in the disease, and only as the result of long continued lateral deviation. This Mr. Adams has shown, by *post-mortem* demonstration, to be a complete error. So far from being a late consequence, his observations prove it to occur very early, probably invariably preceding the formation of the curvature. He considers it in fact the *initial distortion*. My own belief is that it follows a *posterior curvature*, which it subsequently serves to mask and sometimes to obliterate.

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The instrument which I make use of in the treatment of this affection, and which I now have the honor to present for the inspection of the Society, I have devised to meet the two special indications referred to, namely, the rotation of the vertebræ and the *early posterior curvature*.

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The three movements necessary to be employed to meet all the indications in a case of idiopathic lateral curvature may be stated as follows:

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3. An anterior-posterior movement in a perpendicular plane, directed against the apex of the posterior curve behind and against either extremity of that curve in front.

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This portion of the instrument is in all respects identical with the upright of Dr. Taylor's Angular Curvature Instrument, having its pad-plate hinged to admit of antero-posterior action.

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Inasmuch as the *apices* of the lateral and the posterior curvatures either actually or nearly coincide, the same mechanism which untwists the spine also erects it, thus accomplishing the third movement proposed, and overcoming the posterior curvature.

Dr. Sayre expressed his unqualified satisfaction at the lucid demonstration of the subject, which Dr. Judson

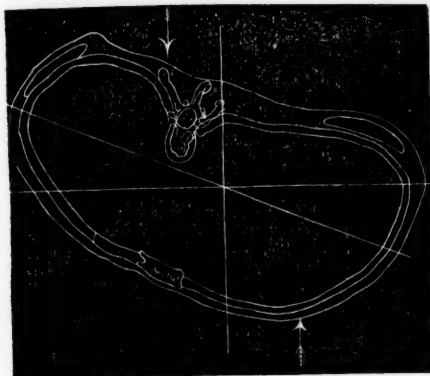
My experience inclines me to the belief that this last mentioned curve nearly always precedes the rotation, as that

Times Correspondent.

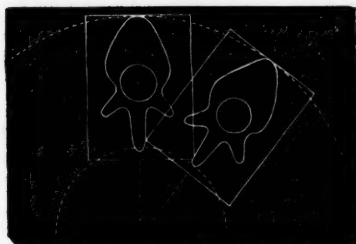
had given, and stated as a remarkable fact, that of late he had been treating patients with lateral curvature, exactly in accordance with the views expressed by the latter, because by experience he had found the method of benefit without understanding before precisely *why* it was so efficient.

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precedes the lateral curve, and that *simple antero-posterior support* in this early stage, coupled with appropriate exercises, would, in the vast majority of cases, avert the more serious distortion.



Dr. Lee's diagram illustrating the results of oblique rotation.



Dr. Judson's diagram illustrating "rotation on a remote axis."

It will be observed that both Dr. Judson and myself recognize the importance of the fact of the inequality of the axes in the process of rotation. The point of difference between us is that he throws the centre nearer to the spinous process, I nearer to the interior edge of the vertebral disk. It is very probable that his view is the more generally correct one, as he has made his study from a more strictly mathematical basis than I. I have read his paper (of which he was kind enough to hand me a copy) carefully, and, to say the least, am not prepared to controvert his position on this point. I go a step farther, however, than he does, and show that not only is the deflection of the bodies always greater than that of the extremities of the spinous

processes, in the well-established curvature, but that, in consequence of the compound nature of the movement, it may at the outset coexist with either correctness in the line of these processes or its deviation in the opposite direction,—a point of very considerable value both in diagnosis and prognosis.

"Hence, as a result of this initial rotation to the right, we have the spinous process of this vertebra, or those of as many as participate in the movement, deviating from the perpendicular towards the left, thus forming temporarily a curvature to the left. How long this reverse curvature of the line of the spinous processes will continue, or indeed whether it will ever take place, will depend upon the promptness with which the sideward displacement of the bodies follows their axial rotation. That it is observed is undoubted, and its occurrence may serve as a partial explanation of the fact that parents, and even physicians, are often puzzled to determine at first in which direction the spine is curving, and are sometimes not a little surprised to see it finally taking the opposite direction to that which they had attributed to it. It is easy to suppose that before the fibres of the fibrocartilage and other anatomical elements have become permanently and rigidly altered, the rotation may predominate on one day, and the lateral displacement another. If we conceive that the latter advances *pari passu* with the former, we shall readily perceive how a very considerable degree of both distortions, but especially of the former, could take place, and yet, the one exactly compensating the other, the line of the spinous processes continue exactly normal and vertical. It is apparent, then, that if we rest our diagnosis and prognosis upon the relation of these processes to the perpendicular, we may be leaning upon a bent if not a broken reed. The bodies may be already the seat of a considerable curve while yet these external indices give no sign of it."

I may add in conclusion that I had adopted this plan of treatment in the incipient stage of the affection some years before the publication of the above papers, and that I have continued to employ it with good results down to the present time. My experience of its practical value must therefore be admitted to antedate that of Dr. Sayre.

BENJAMIN LEE.

1503 SPRUCE STREET, PHILADELPHIA.

ON THE USE OF THE ATOMIZER
IN DISEASES OF THE EYE.

BY M. LANDESBURG, M.D.,

Philadelphia.

THE method of applying to the eye, in certain diseases, medical agents in the form of a fine spray, has scarcely found entrance into ophthalmic practice. It is true that at different times several German and French physicians have made use of the atomizer in certain affections of the conjunctiva and cornea, and, according to their statements, with the best success. But until now this process has met with but little approval among oculists, either from cautious reserve or indifference on the part of practitioners.

Dr. A. Schenkl (at the instigation of Prof. v. Hasner, whose assistant he then was) made a number of experiments on the method of using the atomizer in the different external diseases of the eye, and published his results in the year 1871 in the *Prager Vierteljahrsschrift*.

The high praise which Schenkl bestows upon the use of the atomizer caused me to make some experiments, so as to form an idea of the value of this method from my own observation. My experiments extended over a period of five years, and their results (which I here communicate preliminarily) are based upon a long line of observations.

Dr. Schenkl has successfully applied the atomizer in the following diseases of the eye, viz.:

1. In simple conjunctival catarrh without complications.
2. In chronic blennorrhœa.
3. In pannus.
4. In opacities of the cornea from different causes.

The substances employed were sulphate of copper, laudanum, tannin, cuprum aluminatum.

My experiments were based upon two questions, viz.:

1. Is the atomizer at all admissible in ophthalmic practice, and, if so, in what diseases of the eye?
2. What advantages has the new process over the usual method of treatment?

The results are as follows, viz.:

The use of the atomizer in ophthalmic practice must be regarded as a real advance in the treatment of the diseases of the eye. This method offers several

advantages which cannot be as safely attained by any other process. But it is not to be applied in all diseases of the eye in which it is recommended by Schenkl.

Absolutely injurious is its use in all inflammatory conditions of the mucous membrane of the eye, either in the form of conjunctival or granular catarrh, with or without complication of the cornea.

In trachomatous pannus the success is but moderate, and in all cases inferior to that attained by the treatment hitherto in use.

With respect to the genuine diseases of the cornea, the application of the atomizer must be emphatically condemned in all superficial diseases of the same during their development. But as soon as the inflammatory appearances have subsided, we have in the atomizer a valuable means to bring the disease to a rapid end and to facilitate the absorption of the opacities of the cornea.

In all recent opacities of the cornea, especially after burns and sloughing, there is no other means so well calculated to restore the transparency of the cornea as the use of the atomizer.

In the treatment of diffuse keratitis the atomizer has proved preferable to all other methods.

The period of the treatment was in my cases reduced to almost one-half the usual time, and the results were such as could not possibly be achieved by any other method. The earlier it is applied in diffuse keratitis, the more favorable will be the result. Even the presence of iritis does not contraindicate its use.

With it we achieve what we could not attain until now by any other treatment. We break the force of inflammation, further reparation, and accomplish an almost complete transparency of the cornea.

Whether in old opacities of the cornea the atomizer can be applied with any hope of success remains as yet an open question. The extremely favorable result in one case in which I tried it certainly encourages further experiments.

The substances experimented with are the following:

Cupri sulphas, with and without laudanum.

Simple laudanum, extract. opii.

Cuprum aluminatum.

Sodii chloratum.

Sodii carbonas and bicarbonas.

The best results were attained with extractum opii.

The apparatus used was Siegel's atomizer.

The length of time of each application varied from three to six minutes for each eye, according to the degree of irritation.

The reaction is considerable at first, but disappears very soon.

Bad effects I have never observed.

1338 SPRUCE ST.

NOTES OF HOSPITAL PRACTICE.

PHILADELPHIA HOSPITAL.

AN INTERESTING GUNSHOT WOUND.

Reported by C. WINSLOW DULLES, M.D., Resident Physician.

R. B., æt. 21, white, oysterman, was shot in a bar-room quarrel near midnight, May 20, and brought in an ambulance to the Philadelphia Hospital within a few hours. About 3 A.M. he was examined carefully, and it was found that he had been struck in three places. One ball had made a simple contused wound of the coverings of the chest over the tenth rib, in the line of the anterior fold of the axilla, which did not require any special treatment. The second had entered the back of his hand about the middle, and, glancing round the heads of the second and first metacarpal bones, was imbedded over the trapezium. This ball was found with the probe, and when pushed could be felt deep down just above the "tabatière," between the tendons of the mm. primi and secundi internodii pollicis, while just over it the pulsations of an artery, probably the dorsalis pollicis, could be felt, and within an eighth of an inch to the ulnar side another, supposed to be the dorsalis indicis. On account of the relation of these vessels an incision was made on the radial side of the ball, and it was removed with some difficulty but no hemorrhage. It was of the size known as No. 22, conical, and its anterior end was cut and flattened. The third ball had penetrated the lower lip from below upward, at a point opposite the second incisor tooth of the left side, had struck and broken off the upper second incisor of that side, then glanced down through the tongue from before backward, and from left to right, and entered and buried itself in the floor of the mouth near the last right lower molar.

Further than this its course could not be followed with the probe, but the patient complained of great pain on pressure over a point about a half-inch below and in front of the angle of the right inferior maxilla, from which it was thought that the ball had lodged there. Owing to the delicate anatomical neighborhood, it was not thought well to push the probing too far, and so nothing was done towards extracting the ball.

The hand was dressed with lead-water and laudanum and put on a straight splint. To the neck an ice-bag was applied, and pieces of broken ice given to the patient to be dissolved in his mouth. An enema was administered, bringing away a large quantity of scybalous masses. His diet was made solely milk and beef-tea, as he had much difficulty in swallowing. The next morning he was easier, and continued so all day and night.

May 22.—Another enema was given. The swelling of the neck seemed less, and the pain undoubtedly was. The hand was doing well. This continued all day and during the night.

May 23.—He still does well; has no pain in the hand and little in the neck. Little heat, and swelling less general. He can swallow and articulate much better.

May 24.—He was so much better that the splint was removed from the hand, and treatment confined to cold applications to his neck.

May 26.—Improvement has continued, and he seems virtually well. The wound of entrance and that of excision in his hand have healed by first intention. The ball cannot be found in his neck. All swelling is gone, and we are inclined to think the ball has worked into his mouth and been swallowed. A few days later he was discharged quite well.

TRANSLATIONS.

THE EXTIRPATION OF LARGE FIBROMYOMATA OF THE UTERUS BY LAPAROTOMY, PARTICULARLY BY SUPRA-VAGINAL AMPUTATION OF THE UTERUS (*Centralbl. f. Med.*, No. 25, 1876; from *Berlin. Klin. Wochens.*, 1876, Nos. 12-14).—Hegar gives two cases of successful operation. The first was that of a pregnant woman, on the surface of whose uterus a myoma was situated. Artificial

labor was induced at the sixth month. Five weeks later, laparotomy was performed. The myoma when taken away by the écraseur was found to have a large stalk, and to be accompanied by many small fibroids within the uterus. For this reason the organ itself was, after the application of a double ligature, taken away by the same means, the stump being fixed in the aperture of the abdominal wound. After several accidents from sloughing of the wounded surfaces, etc., the cure was effected by the end of the fourth week.

In Hegar's second case, a rapidly growing intra-parietal myoma was extirpated with much hemorrhage. The myoma left only a small portion of the cervix free; the remaining stump was therefore very short, and could not be fixed in the abdominal wound. The tumor when removed was found to weigh four kilogrammes.

H. advises that the abdominal wound shall be made sufficiently large, so that the tumor, after turning upon its axis, may be withdrawn without being made smaller. If this cannot be accomplished, he advises that it be taken out piecemeal. The original communication contains full details of the procedure. x.

CERTAIN EFFECTS OF THE ETHEREAL OILS (*Centralbl. f. Med.*, 1876, No. 25; from *Arch. Exp. Path.*, etc., v., p. 109).—Binz gives the collective results of various experiments of several of his pupils. Among these the research of H. Meyer, on the influence of certain ethereal oils upon the number of colorless cells in the circulation, is new. Oils of turpentine, camphor, cymol, valerian, cinnamon, and fennel, taken internally in doses of five to fifteen drops, the camphor to .25 grm., increase the number of white corpuscles to double the previous amount in ten to thirty minutes. In some two hours, however, the effect passes off again.

The effect is probably local, from the stomach, since ethereal oil injected subcutaneously into the arm does not produce a similar effect. Oil of capsicum in the above form and dose does not increase the white corpuscles in the least. It is only the ethereal oil which gives a sensation of cold in the mouth, together with contraction of the vessels. Spirits of wine (15 cm.) is without the effect above mentioned, as also several ethereal oily tinctures and drugs, and also ether and acetic ether. The author refers the effect to a transitory hyperæmia

of the lymphatic glands of the abdomen, and particularly of the spleen. x.

ANATOMICAL CHARACTERS OF THE BLOOD IN ANÆMIA.—M. G. Hayern read a paper on this subject before the Académie des Sciences recently, the results of which are published in the *Bull. Gén. de Thérap.*, 1876, v. 2, p. 130. They are as follows: In all cases of chronic anæmia the mean dimension of the globules is always below the normal. In general, these altered globules show more or less irregularity of contour, pointing to a loss of consistency. Besides these changes, the red globules in anæmia often show diminution in color, rarely affecting all the globules, but only those which are deformed. As regards the number of globules, this, in the normal state of health, may be estimated at about five to six millions to the cubic centimetre of blood; in feeble health about four millions six hundred thousand. In the majority of cases of anæmia the blood contains a smaller than normal proportion of red globules. In one case of paludal anæmia the proportion fell as low as one million one hundred and eighty-three thousand seven hundred and fifty to the cubic centimetre, and in a case of purpura hæmorrhagica to one million. In anæmia of moderate intensity, however, the proportion of red globules is often equal to or above the normal. While in a state of health, even in feeble persons, the coloring power of the blood is proportionate to the number of red globules, in chronic anæmia a lack of proportion is constantly observed between the number of these coloring elements and the coloring power of the blood; that is to say, that the coloring power of the blood is always inferior, in a greater or less degree, to that which an equal number of normal globules would give to the blood. The disproportion between the number of globules and their coloring power is greatest in mild anæmia, where, as has been said, the proportion of globules is not diminished. In profound anæmia, accompanied by very marked diminution in the number of red globules, this fact is not so noticeable. x.

A NEW ANTISEPTIC.—E. Hermant (*Centralblatt für Chirurgie*, 1876, p. 528; from *Arch. Méd. Belges*, 1876, B. 6, pp. 407-415) uses a mixture of spirits of camphor and solution of hypochlorate of calcium, which, when gradually mixed, retains the greater portion of camphor in solution.

In gangrenous wounds this solution acts more favorably in favoring decomposition without profuse suppuration. x.

TREATMENT OF ACUTE ARTICULAR RHEUMATISM BY CYANIDE OF ZINC (*Bull. Gén. de Thérap.*, 1876, v. 2, p. 140).—This remedy was suggested by Luten, of Rheims, some time since. Lately, Deschamps has used it with success, and recommends it highly. He employs the following formula:

Zinci cyanid., gr. $\frac{1}{12}$;

Pulv. acaciæ,

Sacch. lactis, āā q. s.—M.

Ft. in pil. j.

To be taken to the number of ten in twenty-four hours. x.

RESECTION OF THE MEDIAN AND ULNAR NERVES.—Braun (*Centralblatt für Chirurgie*, 1876, p. 536; from *Deutsche Zeitschrift für Prakt. Med.*, No. 25) gives the following case. A laborer, 20 years of age, cut himself in the left arm; the wound healed, but the fingers remained useless. Ten months after the accident he came under observation. There was a scar in the upper third of the arm, within the biceps; under this several painful nodules the size of cherry-stones could be felt. The hand was cold, and covered with thin, smooth, brownish-red skin. The nails were thick, crumpled, split, and furrowed. The interosseus muscles and both balls were atrophied; the symptoms, in a word, showed division of the ulnar and median nerves. There was no hope excepting from operative interference.

By the aid of Esmarch's apparatus, and under carbolic-acid spray, the central ends of the divided nerves were laid bare and resected. The peripheral ends were found with difficulty, since they had become retracted nearly an inch, and were somewhat deflected from their normal position. They were freshened and joined to the central extremities by fine sutures, and, the wound being closed, were kept in position by a right-angled splint. There was severe pain in the wound for two days; it closed after profuse suppuration at the end of a month, at which time the nerve-sutures, with one exception, remained fixed. The sensory and motor paralysis continued, but electric stimulus aroused slight movements in the muscles. Six weeks after the operation, the sutures and splint were removed. Six months after the operation, some movement was restored

to the hand. Eighteen months after the resection, the condition of the limb was as follows. The forearm was much stronger; the skin was thicker, warmer, and not so shining; the nails were less thick and crumpled. The activity of the flexors and pronators of the hand had become almost entirely re-established, while the movements of the ball of the thumb and that of the little finger were still imperfectly performed. Feeling had returned, with the exception of occasional imperfect localization. Irritation of the nerves above the sutures aroused energetic contraction; below the sutures, none: that is to say, conduction had returned, but not irritability of the peripheral end. The patient was able to perform his work once more perfectly well.

Braun also alludes to another case of Langenbeck's, where resection was performed after two years. It is the late performance of the operation which gives these cases interest; cases of resection of recently-separated nerves are not rare. x.

INTESTINAL OBSTRUCTION—EMPLOYMENT OF THE INDUCED CURRENT—CURE—M. Giommi (*Centralbl. f. Med.*, 1876, p. 535; from *Raccogliore Med.*) observed the case of a stout, healthy man, 51 years of age, who had suffered some weeks from total obstruction of the bowels. The patient was almost in a state of exhaustion. With the idea that atony of the intestinal walls was at the bottom of the trouble, G. employed a strong induced current, one electrode being placed in the rectum, the other upon the abdomen in the neighborhood of the transverse colon. The application was made several times daily, from ten to fifteen minutes at each sitting. The result was surprising. After the escape of gas in large quantity, copious stools followed, and the patient was discharged cured within a few days. x.

POISONOUS PROPERTIES OF GLYCERIN (Beaumont: *Le Mouvement Médical*, 1876, No. 34).—Chemically pure glycerin when introduced beneath the skin of dogs in quantities of 8 to 10 grains to the kilogramme of the bodily weight of the animal gave rise to fatal poisoning. The symptoms during life and the appearances found after death were similar to those met with in acute alcoholism. B. gives a caution in regard to the thoughtless administration of large doses of glycerin for therapeutic purposes. W. A.

MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 25, 1876.

EDITORIAL.

THE MAD DOCTORS OF AMERICA.

MOST of our readers will remember the scurrilous attack made by the London *Lancet* upon what it was pleased to call the "mad doctors" of America, and some may have read the "Notes on American Asylums," which it drew forth from the pen of Dr. Bucknill. More recently the *Lancet* has renewed its onslaught, although, perhaps, with less unfairness and, we had almost said, vulgarity than before. Those of our readers who are as well acquainted as is the writer of the present article with our Philadelphia City Lunatic Asylum, and have read the reports of various commissions upon the practices of outlying districts and communities, must feel that there is much in the treatment of the insane in the United States that calls for reform. For the wretchedness, the over-crowding, the improper care or neglect which exists in certain places, the doctors, however, are not to be blamed. In most cases they have done all they could to effect change. The evils are often the necessary fruits of the ignorance and comparative poverty of new communities, heightened, in the present instance, by those faults of our governmental system which have made politics a by-word of reproach amongst us, and which would assuredly destroy our present nationality were it not that public opinion and a free ballot will of a certainty continue the political reforms already commenced. Moreover, the abuses that exist are local. In every portion of the country, but especially in the older parts, are numerous well-managed institutions. It is for these only that the American alienists should be held responsible.

We do not claim for them perfection, but certainly, in spite of defects, they are

on the whole just subjects of pride. We think that in some instances there is danger of the medical chief becoming a mere executive officer. Moreover, we are inclined to agree with the alienists of Great Britain in the superiority of the non-restraint method; but assuredly this is still a matter of such doubt as to be fairly a subject for honest difference of opinion, and to entirely prevent any person who respects his own moral character from lampooning or vilifying those who do not agree with him. The sweeping general charges of the *Lancet* were so grossly untrue that they must have been based upon unscrupulous malice or equally culpable wantonness or ignorance.

It is therefore with much pleasure that we see that Dr. Bucknill brought the matter before the Medico-Psychological Association of England, at its annual meeting this summer. His resolutions were considerably discussed, but the modifications made of them were simply meant to intensify the condemnation of the course the *Lancet* has indulged in. It was very freely hinted that the *Lancet* in its attacks upon Dr. Nichols, of Washington, had so gone beyond the line of propriety that if Dr. Nichols were an Englishman it would in all probability have to pay a heavy penalty for libel. The resolution finally adopted by a unanimous vote of the Association was as follows:

"That this Association, while reserving its opinion on the general question of the treatment of the insane of America, and on matters which are under inquiry, desires to express its esteem for the medical men engaged in the treatment of the insane in the United States, and its sympathy with those who have been made the subjects of unfounded imputations and accusations, either in the United States or in this country."

DR. GRAINGER STEWART has been elected to the Chair of Medicine in the University of Edinburgh, formerly held by the late Prof. Hughes Bennett.

EXSECTION OF THE PANCREAS.

IN the *American Medical Weekly* for November 11 is reported a case of Western surgery which we believe stands unrivalled, although Dr. Justin, who operated, must share the credit not only with Dr. B. B. Allen, of Sebastopol, California, who attended to and reports the case, but also with the unknown individual who handled the knife so skilfully, and with the mule-like obstinacy of the constitution of the patient operated upon. The case was that of an Indian who was stabbed in a number of places, from one of which the pancreas had protruded twelve hours before the arrival of the physician. As this protruded part was gangrenous, the remaining seven inches were exsected. The report of the case was made twenty-one days after operation; at which time the ligatures had come away and the wounds completely cicatrized, the patient being to all observation well.

DR. JOLLIFFE TUFFNELL has written a very practical letter to *The Medical Press and Circular* concerning his trip to this country, which we trust may lead some of his confrères to visit us in the future. Dr. Tuffnell found only one source of melancholy,—namely, the dearness and badness of the wine and cigars in this country,—but thinks it worth while to defy this source of misery for the other good things to be seen and tasted of.

It seems that the gates of the medical road to fame have not been so widely thrown open to the softer sex in the British kingdom as was believed. Recently six ladies who applied for permission to be admitted as students to the Queen's College, Galway, were refused by the Council.

THE medical classes in this city are a little larger than those of last year.

CORRESPONDENCE.

NEW YORK, November 11, 1876.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR,—At the meeting of the Medical Journal Association, October 20, Dr. George M. Schweig read a paper on the "*Use of Electric Baths in Cerebral Exhaustion*," in which he stated that he had found them more efficacious than any other plan of treatment which he has tried. The first essential, however, in this, as in all other modes of treatment, he believed to be perfect rest on the part of the patient. If he should continue to pursue his usual avocations, he would receive no benefit whatever from his physician; and the writer said that he had never succeeded in relieving a single case where this course was persisted in. Both currents might, of course, be used in the baths, but he was in the habit of relying mainly on the galvanic, as he did not regard the faradic of much service, except in cases where there were evidences of paresis, in which it was of decided benefit. The length of the bath should at first be ten or fifteen minutes, but should afterwards be extended to twenty-five or thirty minutes. At first the patient ought not to take one oftener than every second day, though after a time he may take one daily with benefit. As the case progresses towards recovery, it is not necessary to give the baths so frequently, and the length of time intervening between them can be gradually extended, until they are finally discontinued altogether. As a rule, the first evidences of improvement in the patient are noticed in about three weeks after the treatment has been commenced. The only remedies (except the bromides, in appropriate cases) which the writer has found of service, in addition to the electric baths, are cod-liver oil and phosphorus, the latter being given either pure or in the form of phosphide of zinc. The electric bath has proved an excellent hypnotic in his hands, and in one or two instances of delirium tremens he has succeeded in producing sleep by this means when all the ordinary remedies had failed.

The Putnams are about publishing a book by Dr. Schweig on the uses of the electric bath, and its mode of application.

At the meeting of the Association, October 27, a paper, by Dr. M. A. Wilson, on "*Cerebral Embolism*," was read. As this paper was devoted almost exclusively to the narration of the case of a patient who was a near relative of its author, and it would have been no slight trial to him to read it in public, this was done by the Secretary, Dr. Robert W. Taylor. The full title of the case would be, Mitral Stenosis; Cerebral Embolism; Left Hemiplegia; Death. The patient was a young lady, twenty years of age, who was subject to no hereditary disease, and had always en-

joyed good health, with the exception of an attack of acute articular rheumatism when she was eleven, and one of pleurisy five years ago. No disease of the heart, as a consequence of the rheumatism, was detected until within a year of her death, which occurred February 22, 1875, and no bad effects were left by the pleurisy. A few months before her death it was found that her heart was considerably hypertrophied, and that there was a presystolic murmur at the apex, indicating mitral stenosis with regurgitation. There was also an aortic murmur, but this was attributed to anæmia by the physicians in attendance. At this time she suffered considerably from dyspnœa on exertion, and other symptoms of cardiac trouble; but these all entirely disappeared after she had been put upon strong tonics and the most nourishing diet for a time.

In October, 1874, while making a visit at a friend's, she suddenly lost all power over herself and dropped to the floor, at the same time experiencing a violent pain in the right temporal region. She did not, however, lose consciousness. As soon as medical aid could be summoned, it was ascertained that there was some degree of facial paralysis, and complete hemiplegia of the left side. There was slight mental hebetude also; but this, together with the facial paralysis, entirely disappeared within twenty-four hours. Just after the attack there was great difficulty of speech, and this seemed to impress the patient so ludicrously that she made an attempt to laugh, but, finding this impossible, she gave vent to a violent burst of tears. At this time she could not protrude the tongue beyond the lips. After a few days, she was removed to her own home, and a number of eminent physicians called in counsel. Strychnine was administered hypodermically, and the tonics and nourishing food kept up. Electricity, in the form of the faradic current, was tried for a time, and afterwards, by the advice of Dr. A. D. Rockwell, central galvanization was employed. Then for the first time was any power perceptible in the affected side, and after a short time she was able to walk with assistance. The faradic current was now applied daily, and galvanization every second day; while the strychnine, together with iron and other tonics, was still continued. During the course of her illness she suffered considerable pain in different parts of the body at various periods. For a time this was confined to the region of the spleen, and afterwards was experienced in her right wrist. The latter was followed by a feeling of numbness, and there was no pulse at the right radial artery at the time. The day after this was noted, all these symptoms disappeared, and the pulse was then precisely alike at both wrists. She suffered more or less from vesical irritation, with *ardor urinae*, and constipation was almost constant.

One day, about three weeks before her death, Dr. Wilson, on entering her apartment, found her standing at the wash-stand, to which she was holding on with a firm grasp, while her body swayed backward and forward like that of an intoxicated person, and her eyes were fixed in a vacant stare. He at once lifted her on to the bed, when she burst into tears, and, on regaining her composure, told him that she had become entirely unconscious while standing at the wash-stand. From this period he was of the opinion that she was never the same intellectually as before, her actions seeming to him to indicate that softening of the brain had set in. Those not so familiar with her, however, did not notice much difference in her. There was now more or less general muscular twitching, with tonic spasm of the muscles of the calf, and, as the strychnine had lately been pushed to a considerable extent, these were attributed to it. The dose was consequently diminished, but, the phenomena continuing, it was stopped altogether. Even this had no effect upon the muscular twitching and spasm, and Dr. Wilson believed them to be really due to cerebral irritation. About this time she had an attack of violent pain in the left temporal region, and the mouth was strongly drawn towards the same side,—the first facial paralysis that had been noted since the day of the commencement of her illness in October. On the 20th of February, while standing in the centre of the room, she was noticed by a little niece, who was with her, to be on the point of falling, and was with difficulty assisted to the bed. She appeared to be suffering from pain in the head, and vomited once upon reaching the bed. The lower jaw was jerked violently open, and remained for some time in that position, notwithstanding all her efforts to close it; but afterwards the teeth were shut tightly on the end of the tongue. The heart's action was greatly excited, and the pulse and respiration quickened. There were now violent clonic convulsions, followed by strong tonic spasms of all the muscles. The pupils were but slightly affected, the eyes appearing natural, but intensely anxious in expression. Voluntary deglutition was destroyed, but the patient swallowed involuntarily when there was an accumulation of mucus in the fauces. The next day there was a change in the respiration, which became jerky in character. There was a long inspiration and two efforts at expiration, the first one being the shorter. Coma gradually set in, and she died February 22, at 3 A.M.

The autopsy was held thirty-six hours after death, only the brain being examined. A firm clot was found in the middle cerebral artery of the right side, and the corpus striatum of that side was almost completely broken down. All the rest of the brain was normal, as far as could be made out. It was

thought from the symptoms, by some of the medical men in attendance, that apoplexy had occurred at the last; but no evidence whatever was found of it.

Among the points of this unusually interesting case to which the writer called attention were the following:

There was no loss of consciousness when the embolism occurred. As it has been definitely ascertained that this sometimes results in these cases and sometimes does not, its occurrence or absence is no longer regarded of any diagnostic value.

The emotional phenomena accompanying the attack.

The pain in the right temporal region at the time the embolism occurred.

The occurrence of other embolisms, in the right radial artery, and probably also in the spleen and in the left middle cerebral artery.

The occurrence of softening and of muscular twitching and spasm as a result of it.

Death preceded by clonic convulsions, followed by tonic spasm and coma.

The futility of all treatment. Such cases must inevitably prove fatal, as when these cerebral arteries, which have no anastomoses, become obstructed by embolisms, no collateral circulation can be established.

At the meeting of the Academy of Medicine, October 19, Dr. James R. Leaming read a paper on "*Some Practical Considerations of Consumption*," in which he called special attention to the differences, both clinical and pathological, between tubercular and fibrinous phthisis, which are both known, unfortunately, under the common name of consumption, and are too often confounded with each other by the mass of the profession. In the same way, he said, typhus and typhoid fevers had been formerly considered identical; but they were not more distinct diseases than these two forms of consumption. He believed that tubercle, as such, never had a very long existence in the system. If it does not become absorbed in a comparatively short time, it begins to undergo degeneration, and this process, which may be either rapid or slow, produces the most injurious effects upon the system. It is remarkable, said he, how rarely we find tubercle itself at autopsies, though the evidences of its having been originally present are often sufficiently abundant. It is sometimes no easy matter to make the diagnosis of acute tuberculosis, and it is probable that many cases of it occur in which there is complete recovery, the affection having been mistaken for typhoid, intermittent, or simple continued fever, or some other disease. Many of the cases which end fatally also show how liable we are to make an incorrect diagnosis in this condition. The essential element of the fibrinous form of consumption consists in the bands of organized tissue, which result from plastic exudation in the pleuræ, and which may extend into the lung itself, impeding

the free movements and interfering with the functions of the organ. In the diagnosis the danger is that the case will be mistaken for one of bronchitis; and this very frequently occurs. In the early stages the physician is thus likely to underrate the seriousness of the disease, while in the more advanced stages he will probably mistake it for tubercular consumption, and thus overestimate the danger. A newly-formed exudation, if not absorbed pretty soon, becomes organized, thus interfering with the action of the lung, and rendering the patient liable to continual fresh attacks of the same nature. It is, therefore, of the greatest importance that a correct diagnosis should be made early, as the affection, when taken in time, yields promptly to appropriate treatment; while if the case is allowed to run on, the lungs may become fatally damaged. Tuberculous may, of course, be associated with fibrinous disease of the lungs. Tubercle, as a rule, is produced by some irritation, more or less continued, in the system; and if plastic exudations are not absorbed, they may easily lead to its formation in those predisposed to it.

In regard to treatment, besides the most careful attention to the general hygienic condition of the patient, Dr. Leaming stated that he relied principally upon mercury and muriate of ammonia. It was often well to commence with the former, which should be given in full doses, and afterwards put the patient on the ammonia, which, in order to have the desired effect, should be given to the extent of five to ten grains every waking hour.

He quoted three cases of phthisis cured by salivation by Dr. Benjamin Rush, at the Pennsylvania Hospital, in the early part of this century, and said that he had no doubt that they were of the fibrinous variety. He himself had cured a number of cases of asthma by the free use of mercury. They were cases in which there were fibrous adhesions; but where the affection was of a nervous character, this remedy always failed. Counter-irritation by blisters, iodine, the application of heat and cold, porous plasters, etc., was also recommended.

At the last meeting of the Academy, Dr. Stephen Smith read the history of *thirty-five successive amputations* successfully performed one hundred years ago.

Dr. Hammond, at a meeting of the Neurological Society, November 6, read a paper on "*Hysterical Contractions*." There was scarcely a muscle or group of muscles in the body, he said, which may not be the subject of hysterical contraction; and though this fact has long been known, semblance to organic disease is often so perfect that physicians are still liable to be deceived by the counterfeits. He then related about a dozen cases which had occurred in his own practice, dividing them into three classes: those in which the muscles of the head and trunk, those in

which the muscles of the upper extremity, and those in which the muscles of the lower extremity were affected. All of these cases recovered, either spontaneously or as the result of treatment. In those of the first class, the sterno-cleido-mastoid was the muscle principally involved. There was one very curious case, in which, after faithfully but fruitlessly employing electricity, the bromides, and the hypodermic injection of atropia, as recommended by Da Costa for wry-neck, he made a section of the sterno-cleido-mastoid; when, almost immediately, the same muscle on the other side of the neck became similarly affected, drawing the head in the opposite direction. This had to be cut also, and then followed a number of continued tonic contractions of various muscles of the upper part of the body, so that quite a series of myotomies and tenotomies had to be performed. Finally the case was given up as entirely beyond the power of either medicine or surgery to relieve; and about two years after that date the patient became cured spontaneously. In most of the cases the contractions came on very suddenly, in one instance resulting instantaneously from alarm in consequence of the cry of fire. Of the muscles of the upper extremity, the biceps was most likely to be attacked, and after that the flexors of the fingers. Where the latter are affected, Dr. Hammond is in the habit of applying the galvanic current to the flexors, and the faradic to the opposing extensors. The lower extremities, he thought, were more frequently the seat of these contractions than any other part of the body, and the muscles most apt to be affected are those which act in flexing the leg upon the thigh. The gastrocnemius and the solus suffer notably from these contractions, and the heels are not unfrequently drawn up to such an extent as to cause a deformity closely resembling talipes equinus. Sometimes the limbs are so violently flexed that the heels are buried in the buttocks. Dr. Hammond then went on to speak of hysterical affections of the joints, to which attention has been called by Sir Benjamin Brodie and others. The cases which he had described he said were called hysterical, simply because there seemed to be a hysterical element entering into them, and for want of a better name. In all, he was inclined to think, there was probably a central lesion of greater or less seriousness. The idea that the eccentric irritation was primary and resulted in a secondary centric lesion, although entertained by no less an authority than Duchenne, he considered quite untenable.

In the treatment he relied mainly upon the bromides (especially those of zinc and sodium), on account of the effect which they seem to have, when given in full doses, of causing relaxation of the contracted muscles; but he had also found electricity, tonics, etc., of benefit. In view of the history of several of the

cases, however, in which spontaneous recovery unexpectedly took place, he was not disposed to attach too great value to any therapeutic measures which had been hitherto employed. In one case in which there was twitching of other muscles than those affected by contractions he had given ergot, as he believed that a certain amount of spinal hyperæmia was thus shown to exist.

Dr. M. A. Pallin criticised Dr. Hammond's cases on the ground that they were inadequately described. It was a significant fact that in all but one of them the patients were females, and yet not a word had been said of the menstrual life or the condition of the sexual organs in any one of them. He was one of the few, he said, who believed that all hysteria, properly so called, was really due to some source of irritation in the ovario-uterine tract in the female and the genitals in the male, and in cases of the disorder he had rarely or never failed to detect the presence of such a cause. He thought, therefore, that hysteria was no more a disease than dropsy, and that whenever a case presented itself which was characterized by hysterical symptoms, we should seek to discover their ultimate origin, and, instead of calling it merely a case of hysteria, assign to it some definite term in accordance with the pathological condition found to exist. He then described a very marked case of hysterical contraction, where the patient had been undergoing all sorts of treatment before she was brought to him. The patient was a young woman who had been unable to walk for some time, and whose heels were drawn tightly up against her buttocks. No one, it seems, had ever thought of making a vaginal examination; and as soon as he did this, Dr. Pallin discovered that one of the ovaries was entirely out of place and intensely painful to the touch. When any pressure was made upon it, not only did it induce increased tonic spasm of the muscles, but also brought on an attack of hysterio-epilepsy. He consequently advised and strongly urged the removal of the ovary; but this was not agreed to by the other gentlemen in consultation, and the patient died about a year afterwards of marasmus. He was of the opinion that could the offending organ have been extirpated, the constant and excessive strain upon the nervous system would have been removed, and the patient would probably have made a good recovery.

Dr. L. A. Sayre agreed with Dr. Pallin that in this class of cases there is always a definite cause which we can usually find out if we search properly for it. He then related a very remarkable case which had recently come under his notice. The patient was a little boy of five years of age, who seemed to be entirely idiotic, could not speak articulately, and was suffering to such an extent from internal strabismus that it made him blind. He was entirely unable to walk, and any effort to

do so was accompanied by such contortions of the body and extraordinary movements of both the upper and lower extremities as it was impossible to describe. As in so many previous cases of this want of co-ordinating power in children, he found that the boy suffered from constant priapism. The prepuce was tightly adherent, and any irritation applied at the glans penis produced instantaneous spasm of the whole system, but most notably of the lower extremities. Under these circumstances, he at once decided to perform circumcision; and this little operation was followed by the most extraordinary results. The strabismus quickly disappeared, and the child was able to see perfectly; while he was also soon able to walk in a perfectly natural and easy manner. The very next day he began to talk fluently, and, what is very remarkable, instead of his being idiotic, as had always been supposed, it was found that his intellectual powers were very fully developed for his age; showing that he had previously lacked only the power of expression. It seemed indeed like a complete emancipation of his whole being from some power of darkness that held it in the most abject captivity; and after the operation the child's relatives could scarcely recognize in him the blind and helpless little idiot whom they had been accustomed to see.

At the last meeting of the Public Health Association, November 9, Colonel W. P. Prentice, its chairman, made an interesting report on behalf of the Standing Committee on Public Sanitary Administration, in regard to a variety of subjects.

The first was the laws providing for the registration of births, marriages, and deaths. It is proposed during the coming session of the Legislature to have such amendments to the present laws enacted that this registration will be much more accurate and complete in every respect than it has hitherto been.

The second was the proposed law for the abatement of suburban nuisances felt principally in cities. This measure was brought up at the last session of the Legislature, but, owing to the late period at which it was done, it failed to pass. Although it had its origin in this city, it is designed to protect equally all the towns of the State, and it is earnestly hoped that it will be passed during the coming winter. For a long time past the citizens of New York, and especially those living on the east side of town, have been suffering from the disgusting stench, as well as unwholesome vapors, arising from the coal-oil refineries and the manufactories where their refuse material is converted into fertilizing agents, which are situated just across East River on the Long Island shore. The New York Board of Health is powerless to abate this intolerable nuisance, and all appeals to the Brooklyn board have been unavailing. The owners of these manufactories are wealthy, and backed by considerable political influence, which it will require

no small effort to overcome in the Legislature; and the Association has therefore decided to call a public meeting, when the whole subject will be thoroughly ventilated.

The third topic treated in the report was the practical tests for the prevention of food-adulteration. In this respect the agents of the Board of Health have accomplished an excellent work, and particularly in the prosecution of venders of adulterated milk. In their hands the lactometer has answered admirably for all practical purposes, though in doubtful cases the microscope has also been called into requisition to determine the character of specimens of suspected milk.

The fourth and last was the economical and efficient inspection and reform of minor nuisances, and the necessary sanitary work of the police under the law. In this connection the committee regretted very much the action of the Board of Police in disbanding the "Sanitary Squad," which had formerly been of essential service to the health authorities.

On this occasion the Centennial Exhibition Commission of the Association, Mr. C. J. Moore, Chairman, also made their report. They had found the display of the appliances of sanitary science exceedingly meagre, and when they inquired of General Hawley why this was so, he replied that it was because no special effort had been made to have the subject represented, and that such societies as the Public Health Association ought to have applied regularly for a space, like other exhibitors, where they could have made a creditable display. The committee expressed the hope that the matter would not be neglected to such an extent in the Paris Exhibition of 1878, and urged the Association to take some action in regard to its representation there.

In this city at present a water-famine seems more imminent than at any time since the Croton water-works were originally established. For more than a month no water has been obtainable above the first floor of the houses over a very large portion of the city, and the trouble seems to have steadily grown worse until a day or two since. Chief Engineer Campbell now announces that the water in the Croton dam has risen twenty-four and one-half inches (representing an increase of two hundred and fifty thousand gallons), and in the reservoirs in Central Park sixteen and one-half inches. This is attributed in part to the recent showers, and in part to the increased care on the part of citizens to prevent waste.

During the past week we have had the novel sensation of a female pedestrian contest here. The competitors are a young American and a young German woman, and five hundred dollars is to be awarded to the one who succeeds in walking the largest number of miles in six days. On the first day of the match the *fräulein* accomplished the remarkable feat of

walking fifty miles in a little over twelve hours, with but one rest of ten minutes.

The election of officers at the County Medical Society resulted as follows: President, John C. Peters; Vice-President, Isaac E. Taylor; Recording Secretary, Frederick A. Castle; Corresponding Secretary, A. E. M. Purdy; Treasurer, H. P. Farnham.

T. G. Thomas has been elected President, and J. Foster Jenkins, of Yonkers, Vice-President of the Obstetrical Society.

The profession has lately been called to mourn the loss by death of Dr. Julius Theband, a very accomplished and popular practitioner of this city. While preparing for a day's shooting, a cartridge exploded in his hand, and the copper penetrated both the lung and pericardium. He lingered in great suffering for nearly a week after the occurrence of the accident.

PERTINAX.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, OCT. 12, 1876.

THE PRESIDENT, DR. WILLIAM PEPPER, in the chair.

Specimens (fœtal envelope, uterus, and ovaries) illustrating a case of extra-uterine pregnancy. By FREDERICK P. HENRY, M.D.

MY principal object in presenting these specimens is to obtain the opinion of the Society as to the nature of the fœtation which they represent.

I reserve the full clinical history, which would be here out of place, for future publication, merely stating that the gestation proceeded to full term, that the diagnosis was accurately determined before death, and that the question of operation, after consultation with Dr. Goodell, was decided in the negative.

The specimens consist of the fœtal envelope, to the inner surface of which the placenta is adherent, the uterus, and the ovaries. It will be observed that the sac is attached to the right ovary, and perhaps also to the fimbriated extremity of the corresponding Fallopian tube, and upon the nature of this attachment turns the question between external ovarian or ovo-abdominal, tubo-ovarian, and abdominal pregnancy. If the connection is organized, the case is to be classified under one of the two former species; if simply inflammatory, under the latter.

That it is no easy matter to determine the exact nature of an extra-uterine pregnancy is forcibly stated in the following quotation from the admirable work upon this subject by the late Dr. Parry: "It should be borne in mind that, at the autopsy of a woman who has

carried an extra-uterine child to or near term, it is often extremely difficult, nay, more, it is absolutely impossible, to determine the true seat of the pregnancy. Pressure and the other forces brought into operation by the ovum during its growth so change the relations and even the structure of the organs that it is impossible to determine the original seat of the ovum. The uterine appendages are frequently found so thinned and atrophied that their recognition is difficult or even impossible. This fact should be borne in mind, so that those who put their observations upon record may so accurately record the facts, that data may be gradually accumulated that will aid us in determining the comparative frequency of the species of misplaced gestations."

Whatever may be the nature of the fœtation, a very interesting pathological question is that concerning the existence of muscular fibres in the adventitious uterus. The specimen under the microscope is a transverse section of the fœtus-containing sac, and I think will be found to exhibit the organic muscular fibre. I speak thus hesitatingly, because I have in mind the great difficulties frequently attending the diagnosis between connective tissue and unstriped muscle. The resemblance between these two tissues being so great, other considerations than those founded upon the mere appearances are to be sought for in support of one or the other view. One of these is the arrangement of the cells and fibres. In connective tissues, of which tendon is the type, there will be found as a rule a regular arrangement of the cells and fibres. In making a transverse section these will be cut transversely. The specimen under the microscope is a transverse section of the sac, and, therefore, if this were composed of connective tissue, we would expect to find the fibrillæ and cells cut transversely, whereas it will be seen the arrangement is by no means uniform, some of the cells being severed transversely, some obliquely, and others longitudinally, but by far the greater number in the latter direction. It is true that this regular arrangement of connective tissue is not without its exceptions, and, unfortunately for that portion of my argument founded upon the arrangement of the constituent parts, the ovary is an organ which presents one of the most marked deviations from the rule. I say unfortunately, because, it may be recalled, the sac is adherent to the right ovary, although it is not yet apparent whether the adhesion is inflammatory or organic. Waldeyer, in Stricker's Manual, says that in the ovary, beneath the albuginea, there is "a layer of compact connective tissue, also poor in cells, whose fibres show no special attempt at stratification, but run in every conceivable direction." On the other hand, His believes this layer of so-called connective tissue, and indeed the whole stroma

of the ovary, to be composed of "stunted muscular tissue," to which he gives the name of "spindle tissue." In this individual case, therefore, it is impossible to decide upon the nature of this tissue by its arrangement. If the adhesion between the sac and ovary is vital, *i.e.*, organic, and therefore the sac a mere proliferation of the ovarian stroma, it is to be inferred that it would preserve the irregular arrangement of the parent cells, concerning the nature of which, however, authorities disagree. Whatever value, in a diagnostic point of view, the arrangement of the elements may possess in general, there is unfortunately nothing to be learned from it in the present instance until the nature of the attachment to the ovary is decided.

It will be observed that in and around the nucleus of many of the cells there are numerous oil-globules. These I regard as the first traces of involution, which is said to begin about the first week after delivery (Dalton). In the case under consideration, the full term had been passed by more than that time. It is possible that the behavior of these cells under polarized light might help to determine their nature.

The importance of the presence of muscular fibre in this sac, provided its adhesion to the ovary is decided to be inflammatory, is evident. In that case it would have to be regarded as a new formation, a metamorphosis of the cells of the fetal membrane.

Leaving this interesting question, I would call attention to the uterus, which is enlarged to about double the normal size, is very vascular, and presents the remains of a decidua. The decidua was distinctly felt by me on introducing my fingers into the uterus, and was broken up by the necessary examinations and discharged by the vagina.

In conclusion, I would remark that if this be decided to be a case of external ovarian or tubo-ovarian pregnancy, it is very unusual in such cases to find the ovaries and tubes so little involved. In this case their structure does not appear to be altered. It is my opinion that blood was conveyed to the placenta through the vessels of the right broad uterine ligament.

The ovaries have been preserved intact, and therefore the situation of the corpus luteum has not been determined.

Dr. JAMES TYSON said he had carefully examined the section of the cyst-wall under the microscope, and had come to the conclusion that the large granular spindle cells there found were *not* unstriated muscular-fibre cells, but connective-tissue cells,—that is, such cells as we meet in what might be called the second stage of organization of inflammatory tissue, in which round cells have disappeared and spindle cells have replaced them, which in the third stage or stage of complete cicatricial tissue would be replaced by pure fibrillated connective tissue, by much of which

indeed they are already accompanied. As to the state of incipient fatty degeneration to which Dr. Henry called attention, Dr. T. did not consider the granulation in the cells any more marked than is very often found in these large spindle cells of new formations.

Dr. C. B. NANCREDE asked Dr. Tyson whether the tissue of the cyst was not too old to contain the comparatively young elements of lymph which these spindle cells represent, especially since the specimen was removed from that portion of the sac which must be considered the oldest.

Dr. TYSON thought not, as the new tissue might be said to be constantly forming.

Dr. H. LENOX HODGE asked whether the post-mortem examination showed whether an operation could have been performed with any prospect of success.

Dr. HENRY replied that the post-mortem did prove that if the woman had been in proper condition to permit the operation, there would have been no difficulty in performing it.

Dr. NANCREDE asked whether the post-mortem examination accounted in any way for the occurrence of the extra-uterine foetation. When we examine the causes producing extra-uterine foetation, at first sight it would seem a matter of wonder that it should not be an every-day occurrence. The only explanation of this seems to be the want of sufficient nourishment for the ovum in its abnormal situation. Thus, an ordinary catarrh of the Fallopian tubes would probably so interfere with the ciliary movements by which the ovum is aided in its onward course, as to allow of its remaining in the tube. In some cases salpingitis results in a complete destruction of these ciliary cells. A more frequent and efficient cause is the adhesions resulting from an old perimetritis. These, by their contraction, cause stenosis, if not obliteration of the oviduct, in some cases permitting the passage of sperm, but not the ovum. Other causes might be mentioned, but the before-mentioned ones will suffice.

As confirmatory of these remarks, it is an interesting fact to note that these extra-uterine conceptions occur most frequently in primiparæ who have been barren for a long time after marriage, and in multiparæ between whose last pregnancies and the extra-uterine one a long time has intervened.

As to operation, it seemed to Dr. N. a great pity that something had not been done in this case. In some thirty-four cases that he had hurriedly collated, where the operation had been performed after the death of the foetus, some thirty-one recovered, whereas when left to the unaided efforts of nature a much greater mortality obtained, something like fifty-two per cent. In the present case, an operation would confessedly have been an easy one. Where the placenta is left *in situ*, the number of successes would probably much

exceed that before mentioned, since one of the greatest immediate risks of the operation is from hemorrhage caused by the removal of the placenta. When a rupture of the cyst occurs, and the diagnosis is clear, in view of the result of recent abdominal surgery, and the experience gained in ovariectomy as to the innocuousness of silk, and much more catgut, peritoneal ligatures, he thought it the duty of the surgeon to perform gastrotomy in order to secure the bleeding vessels. He considered this a duty, because death in such cases was clearly traceable to hemorrhage and the shock produced by large amounts of blood in the peritoneal cavity. Besides, in such cases death is a *certainty*, while the operation offers a *chance* of success.

In those cases where the child is carried to term, and it dies, an operation is frequently successful. When suppuration has occurred, especially when an opening has formed in the abdominal walls by ulceration, the operation is almost always attended with favorable results. The longer, however, it can be delayed the better, provided the above results do not obtain; then, within the limits that ordinary surgical experience dictates, the sooner it is done the better. In illustration of the risks run by a patient who bears around with her an apparently innocuous foetal cyst, Dr. N. related the case of a woman who had passed her full term by some eighteen months, and yet was brought to death's door by suppuration excited in the cyst merely from the depressing influences exerted by grief. This woman, however, reduced apparently to the most unfavorable condition for operation, recovered on its performance. In the light of recent operations upon the healthy peritoneum, this operation ought not to be considered so desperately dangerous a one *per se*.

In four or five cases of abdominal section recently performed for intussusception of the bowel, where prolonged manipulation has been necessary, a surprising proportion of success has been obtained. Other similar operations show how much less sensitive a healthy peritoneum is than most believe; although the puerperal state doubtless modifies this to a great extent.

In the case at present before the Society, no cause of death has been demonstrated beyond the shock from the death of the foetus and its incipient decomposition, resulting probably in some form of blood-poisoning.

Dr. J. EWING MEARS alluded to a case in the practice of Dr. Atlee, in which the operation for removal of the foetus was performed several months after the death of the latter. The remains of the foetus and the fluid contained in the cyst were very offensive. The diagnosis was not accurately made, although the condition was suspected. The cyst was opened and its contents removed, the cyst washed out, and the patient recovered. He quite agreed with Dr. Nancrede, that more frequent efforts

should be made to save the mother by operation.

Dr. M. desired to know whether the foetus occupied a median or lateral position in the abdominal cavity.

Dr. HENRY said the child's occiput occupied the left iliac fossa, and the trunk passed obliquely upwards and to the right. During life the vertebræ could be felt passing in this direction through the abdominal walls of the mother.

He thought the question of operation in this particular case had been discussed too much from an anatomical point of view and with insufficient clinical data. These, when given, might lead the advocates of operation to moderate their views. He knew that cases of recovery after operation had been reported where the patients' condition was apparently desperate, but in these cases accurate clinical histories and records of pulse and temperature were not given.

Dr. H. said that non-interference was decided upon on account of the woman's condition. She was suffering intensely, the uterus and surrounding parts were in a state of great irritation, she had a rapid thready pulse, was bathed in perspiration, in fact almost in a state of collapse and liable to sink at any moment; so that it seemed not unlikely that the operation would cause immediate death.

Dr. NANCREDE referred to a report of one case in a recent number of the *Edinburgh Medical Journal*, where pulse- and temperature-records were given in full.

Dr. N. also alluded to certain apparently desperate cases of blood-poisoning following rupture of an ovarian cyst, its suppuration induced by any cause, or after ovariectomy, where the removal of the decomposing fluids, etc., has resulted in cure. Peaslee and Sims report cases where the most dangerous septicæmic symptoms were produced by an astonishingly small amount of septic fluids, in one case amounting to only a tablespoonful or so. When these were removed by drainages and washing out of the abdominal cavity by antiseptic fluids, all the evil results disappeared in a short time. This peritoneal drainage and antiseptic washing applied to the after-treatment of gastrotomy for extra-uterine pregnancy, would probably much lessen the risks of the operation.

Dr. E. O. SHAKESPEARE said that, through the kindness of Dr. Henry, he had studied two sections of the cyst, the last one to-day. The appearances which struck him led him to agree entirely with the remarks of Dr. Tyson. The characters of the tissue are precisely like those he had seen in sections of the outer sheath of the optic nerve in cases of optic neuritis, where the sheath has been in a state of irritation for some time. This product presents of course a connective-tissue character. The appearances are similar also to those presented by the adventitious sheath

of arteries after ligation. It is true, in this adventitious sheath we sometimes find unstriated muscular-fibre cells. But the great mass of the cells found in the inflamed adventitia must be looked upon as the progeny of connective-tissue corpuscles and the leucocytes rather than as the offspring of muscle-cells. With respect to the section of this foetal sac, the fact that the cells were found only singly in the meshes formed by the intercellular or connective-tissue fibres and elastic fibres and along the course of the bundles of fibres led him to believe that the tissue was fibrous in its character, resembling new fibrous tissue. The cells themselves did not present the typical characters of smooth muscular cells. The shape of the nucleus in unstriated muscular-fibre cells is generally rod-like, while the cells in this structure have oval nuclei, and many round. Nowhere could he satisfy himself that they were rod-shaped. As to the test by polarization, he thought the results must be entirely negative; he had not been able to find any statement as to the effect of polarized light upon the spindle-shaped cells of the connective tissue.

Dr. JOHN GUITÉRAS said that as some of the members seemed to think the cells were those of spindle-cell muscle, he thought the question should be referred to the Committee on Morbid Growths, as he believed the existence of muscular tissue to be quite possible.

Only recently has attention been given to the regeneration of muscular structure, as also to that of nervous tissue. Until the investigations of Zenker, who found that after the degeneration of the sarcoous element in fevers and other conditions the muscular fibre develops again from the nuclei under the sarcolemma,—until these investigations, the regeneration of muscular tissue was disbelieved. The present case might demonstrate the mode of formation of muscular tissue from embryonal formative cells or young connective-tissue cells.

Dr. HENRY said undoubtedly there are no characteristic features by which the two kinds of cells could be distinguished. The question is whether it is possible to say where connective tissue begins and where muscular tissue ends; but no one attempts to answer it.

That it is difficult to distinguish the two is proved by the difference of opinion regarding the structure of the ovary between two such observers as His and Waldeyer, to which allusion has already been made in the paper introducing this discussion. The resemblance therefore being so great, if there is any force in the argument founded upon the arrangement of the constituent parts I think it should be received as final. On considering the connective and muscular (unstriated) tissues, it will be found, as a rule, that the cells and fibres of the former are parallel, while those of the latter are not so. In the uterus, for instance, there are three layers of muscle, the

outer passing transversely across the fundus and continued along the Fallopian tubes, the middle running in every direction, longitudinally, transversely, and obliquely, while the inner is arranged in the form of two hollow cones whose apices surround the tubes, so that a transverse section of this organ will show fibres running in every conceivable direction. In the bladder there is an external longitudinal and an internal circular layer, also a band of oblique fibres arising behind the orifice of the ureter and inserted into the middle lobe of the prostate gland (the "muscle of the ureter" of Sir Charles Bell), so that a transverse section of the bladder at any point will exhibit fibres crossing at right angles, and a still more complicated arrangement if the section include the muscle of the ureter. The muscular coats of the stomach and intestine present similar arrangements. On the other hand, it is unnecessary to go into any detail in order to prove that connective tissue where composing an organ, as in tendon and cartilage, or arranged as a membrane, as in subcutaneous adipose tissue, is comparatively regular in its arrangement. On this ground alone—viz., the arrangement of the constituent parts—I would accept the view of His as to the structure of the ovary in preference to that of Waldeyer.

Dr. TYSON remarked that in treating a question where the points of distinction were so few as between the cells under consideration and muscular-fibre cells, we must take into consideration the locality of the cell; just as in the case of the leucocyte we call it a colorless blood-corpuscle in the blood, a pus-corpuscle in pus, a lymph-corpuscle in lymph, and a mucus-corpuscle in mucus, so here we have no reason to expect to find the elements of muscle, while we have every reason to expect the elements of inflammatory tissue.

Dr. HENRY said he thought that gestation should not be overlooked. He thought the fact that a foetus was contained in this sac would give an impulse in the direction of muscular tissue, and that we might therefore reasonably expect to find it.

Dr. NANCREDE thought it very unsatisfactory to apply the *a priori* method of reasoning to microscopic investigation.

Dr. TYSON said, however that might be, it is nevertheless true that such method of treating the question as he suggested is sometimes necessary.

Dr. SHAKESPEARE could not agree with Dr. Henry as to connective tissue. He did not think that tendon was to be considered a fair type of connective tissue as it is found throughout the body. He could not conceive of a more irregular arrangement of fibres than that which is present in the skin and intermuscular connective tissue.

Dr. HENRY thought that wherever connective tissue forms areolæ it possesses a universally irregular arrangement.

The specimen was referred to a special committee, consisting of Drs. Henry, Mears, Nancrede, Longstreth, and Shakespeare, for report and examination.

Tumor removed from the external auditory meatus. By Dr. CARL SEILER.

The tumor which is before the Society was extracted from the external meatus of a patient at the German Eye, Ear, and Throat Infirmary, a few days ago. The circumstances were as follows:

John G. applied to the Infirmary for deafness in the left ear. He stated that he had never been able to hear well with that ear, but that within the last six months the deafness had increased so much that he was unable to hear anything at all on the left side. An examination of the ear showed the external meatus completely filled with a grayish, semi-solid mass of probably hardened secretion. After removal of this mass, which was tightly adherent to the walls of the canal, the white, glistening surface of a tumor made its appearance. This tumor proved, upon further examination with a probe, to be very hard, void of any sensation, and filling the calibre of the canal so completely that it was impossible to slip the thin wire of the écraseur around it, and the point of attachment could not be ascertained. An excision under such circumstances could not be made that day, and so he resorted to cauterization with the solid nitrate of silver, with a hope of contracting the growth sufficiently to ascertain its attachment.

The next day the patient presented himself again at the clinic, and the tumor was found sufficiently contracted to pass the probe all around. It was found to be attached to the upper wall of the external meatus, about midway between the external orifice and the membrana tympani. The écraseur was then applied and the tumor removed by means of the wire sling without the slightest difficulty. A great mass of hardened secretion was found lying behind, upon removal of which, several small ulcers were seen on the walls of the canal.

PROCEEDINGS OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY.

THE VICE-PRESIDENT, DR. BENJAMIN LEE, in the chair.

At a conversational meeting, held April 26, 1876, after the reading of Dr. TAYLOR's paper, for which a vote of thanks was tendered to the author, the subject of the "Influence of Maternal Impressions" was discussed.

Dr. WM. GOODELL thought that there is more truth in this popular belief than physicians have been willing to concede. He had noticed, however, of late, a growing disposition on the part of scientific men to treat the subject with more consideration. As a matter

of fact, the spermatozoon, a microscopic cell, is capable of transmitting and reproducing paternal traits, both mental and physical. Hence it would seem highly probable that the mother, who contributes so much to the structure of the new being, would be more likely to impress upon it her dominant traits during its plastic stage, and that unusual excitement or agitation on her part during this period would be exceedingly liable to disturb the development of the fœtus. The following case is one in point. He was called to attend a lady, whose husband (a physician) was possessed with the idea that the child would be born with some deformity of the genital organs. This, indeed, Dr. G. found to be the case, for at the birth the foreskin was entirely wanting, and the glans encircled by a ring of granulations, presenting the appearance of a recent circumcision. This occurrence was attributed to the fact that the mother, during early pregnancy, had taken extraordinary interest in a description of this Hebrew rite, which her husband had been invited to witness in a neighbor's child. Among the Jews, children are not infrequently born circumcised; and this curious fact is not to be explained by the law of heredity alone.

Dr. J. S. ESHLEMAN said that there was undoubtedly a germ of truth in the popular belief, but he always endeavored to explain away such morbid impressions, when they existed, for the sake of the mother, whose health might be affected by dwelling on them.

The following case in Dr. E.'s practice appeared at first to strongly confirm the opinion that maternal impressions may affect the development of the fœtus. An Irishwoman was convinced that her child would be born with a tumor "on its seat," because some one had described such a congenital growth in her presence. At the birth a large prominence was discovered in the child's perineum to confirm her impression. This tumor was subsequently removed by Prof. Gross, who pronounced it a fœtal cyst, due to a germ that had been blighted in its development. If the nature of the growth had not been demonstrated, this case would have been confirmation strong; but it would be difficult to see how a mental impression on the mother could be powerful enough to introduce into the uterine cavity the germ of another child.

Dr. JOHN G. STETLER said that it was an acknowledged physiological law that the first pregnancy influenced subsequent conceptions, but thought that it acted locally through the impression on the uterine tissues probably, rather than by means of the nervous system.

Dr. WM. B. ATKINSON referred to a case of natural amputation below the elbow-joint, in his own practice, which had been already reported to the Society. He could scarcely imagine how the umbilical cord could exert sufficient pressure to strangulate a limb and

yet maintain its own integrity and continue its circulation. He mentioned a family where the children were well formed, although the father's face was badly disfigured from birth by what is called a fire-mark. He thought that, if maternal impressions had anything to do with it, this man's children and half of the other children in the lower part of the city, where he resides, should be similarly marked. Since the war there has been a great increase in cripples in our streets, but no corresponding increase has been noticed in the number of congenital deformities. In the case first mentioned, the mother afterwards remembered having seen a one-armed soldier, but it was only six weeks before her confinement. If maternal impressions really exert such a direct effect on the fœtus, then an enlightened public hygiene should prevent cripples from exhibiting themselves in crowded places, for fear of injuring the prospects of the rising generation. An old gentleman perambulates the western part of the city, who has no pætellæ, and is consequently dreadfully deformed. Notwithstanding the fact that he must have been seen by hundreds of pregnant women, Dr. A. had yet to hear of a single case of similar deformity or any other attributed to this as a cause, this gentleman's own children not excepted.

REVIEWS AND BOOK NOTICES.

THE ANATOMY OF THE HEAD. By THOMAS DWIGHT, M.D. Boston, H. O. Houghton & Co., 1876.

The author has endeavored in this volume to present the difficult study of the anatomy of the head from a new point of view. Topographical studies are found in every text-book, and the several parts of the anatomical systems are of course already well described. Studies of transverse sections of the head, however,—made at arbitrary places of selection,—have been reserved for monography.

Doubtless such sections are valuable, and it would be well to add them to the usual methods of teaching. Whether they are of sufficient importance to have a separate work devoted to them remains to be seen. It has appeared from the letter-press that Dr. Dwight has not confined his descriptions to the novel exposition of relations as determined by his sections, but treats his subject very much after the traditional style, and introduces here and there a wood-cut which has no special bearing upon the claim made for his work.

With reference to the sections, they are collected at the back of the book, and are arranged from before backward. Each picture represents *two* sections, the one on the right lying upon a different plane from the left, so that more illustration of the subject is

secured than would at first sight be apparent. The charm of novelty attaches itself promptly to these pictures, and the only detractor the reader acknowledges in their examination is that they do not do justice to the original drawings. We boldly assert this, although we have never seen the originals. But the monotonous grays and absence of comfortable shadows and high lights tell their own story, the one so often the result of the student's labor, of having the so-called reproduction of his drawings falling below the standard expected of them. Some of the fault in this instance is to be attributed to the unfortunate quality of the paper employed. It is without tone, and too hard.

Dr. Dwight is, however, to be congratulated upon the general pleasing character of his book, which, while not presenting many new facts to science (this indeed being impossible), has nevertheless the advantage over other anatomical essays in the same direction of being drawn from the best authorities, and presenting in a compact space an admirable *résumé* of the subject. H. A.

HEALTH RESORTS OF EUROPE AND AFRICA.

By THOS. MORE MADDEN, M.D. Philadelphia, Lindsay & Blakiston, 1876.

Of making many books there is no end, the modern professional reviewer is apt to alter into, there is no use; and when a work really novel and valuable appears,—an oasis amidst a desert of text-books,—joy springs out of the usual monotone of calm indifference. Dr. Madden's production is one of these inspiring themes; the professional world is really better off for his labors. He makes clear an important and much mystified subject, by the light of his very exceptional personal experience. He speaks of what he has seen, and not of what he has learned from guide-books and local physicians whose livelihood is dependent upon the reputation of their spa. Unfortunately, Europe and Africa alone inspire him, and therefore his book is not the one wanted most in this country. If some physician would do for the New what Dr. Madden has done for the Old World, he would confer a great blessing on the American people. For if there is anything which we do not know, it is the exact value of the innumerable climates and mineral waters which nature has scattered over North America. We have not space to follow even the general introductory chapters of the book before us, let alone to discuss details of the health-resorts and spas. We think the division the doctor makes of sedative and stimulating climates true to nature, and his remarks upon the relations of these to disease seem very judicious.

In its bearing upon the modern belief in the contagiousness of phthisis, it is worthy of notice that since Malaga has become a favorite resort for phthisical patients there has been such a notable increase in the number of cases

among the natives as to lead to the general belief in the contagiousness of the disorder, and consequently to the exclusion of consumptives from many of the Spanish boarding-houses. It is also stated that in Algeria the Tebibs, or native doctors, believe phthisis to be contagious.

In taking leave of this book, we thank its author for several hours of pleasant and profitable reading, and most cordially recommend any of our subscribers who may have clients desirous of seeking health in the Old World, to consult, before deciding as to localities, the personal experiences and studies of Dr. Madden.

PRINCIPLES OF HUMAN PHYSIOLOGY. By WM. B. CARPENTER, M.D. Edited by HENRY POWER, M.D. A new American from the Eighth Revised and Enlarged English Edition, with Notes and Additions by FRANCIS G. SMITH, M.D.

A new edition of an old favorite, which, by the labor of the editors, is fully arrayed in the latest fashions of the day.

GLEANINGS FROM EXCHANGES.

DAMIANA (*The Medical Record*, August 19, 1876).—Dr. Alexander Murray reports five cases in which he administered damiana for the relief of impotence, with variable success. Some slight relief was experienced in two or three of the cases, but no decided and unmistakable influence of the drug in the sexual organs seems to have been observed. Damiana produces an eruption of acne after having been taken for some time; it induces large, soft evacuations from the bowels, and occasionally nausea and vomiting. The dose of the fluid extract is from two to four drachms. An infusion may be prepared as follows:

Damiana, leaves and flowers, 2 oz.;
Liquorice, not bruised, $\frac{1}{2}$ oz.;
Boiling water, 16 oz.

Macerate for eight hours in a covered vessel, and strain. Dose, 2 to 4 ounces.

POISONING BY MEDICINAL DOSE OF IODIDE OF POTASSIUM (*The Medical Press and Circular*, August 2, 1876).—Dr. Charles Drysdale reports the case of a man, æt. 36, who was suffering with right hemiplegia, which had evidently been caused by an embolism, as there were abnormal sounds of the valves of the heart. As some symptoms in addition pointed to dilatation of the ascending arch of the aorta, he had on three several occasions prescribed ten-grain doses of the iodide of potassium thrice daily in water. On the first two occasions the effect was to produce a crop of acne-like pustules on the face. The last trial, which lasted three days, brought forth an alarming-looking eruption on the backs of the hands,

as well as on the face and chest. Blebs were formed containing a bloody fluid, which lasted without desiccating for some weeks.

THE USE OF ERGOT IN THE TREATMENT OF PURPURA (*The Practitioner*, November, 1876).—Dr. L. Duncan Bulkley calls attention to the treatment of purpura by ergot, in an interesting paper, the principal points of which are as follows:

1. The treatment of purpura as advised in the books is ineffective and tedious in lighter cases, and insufficient to save life in many of the severe or hemorrhagic cases.

2. Ergot possesses a very decided power in contracting the involuntary muscular fibre, causes divided arteries to contract, acts upon the smaller arteries and capillaries, and has been proved a valuable arrester of hemorrhage in many affections.

3. In purpura the action of ergot is very manifest, causing, when given in sufficient doses, an almost, if not quite, immediate cessation of the cutaneous and other hemorrhages.

4. The most effective method of administration of ergot is by hypodermic injection, and this means renders it peculiarly valuable in purpura hæmorrhagica where there is hæmatemesis, so that its administration by the mouth would be impossible, or in cases where the stomach would not tolerate it.

5. While ergotin, a purified, watery extract, has been advised by many, and has been found to act efficiently in many cases, its action is liable to be uncertain by reason of age or faulty preparation, and after dilution with water it soon becomes inert.

6. Fluid extract of ergot may be administered hypodermically, undiluted, and without local accident, as abscess or inflammation, if care be exercised; and its effect is very prompt and certain.

7. Ergot may be thrown under the skin in any part of the body; the gluteal and shoulder muscles answer well, but the places to be preferred are about the pectoral muscles or at the sides of the chest, about half-way down.

8. Severe cases of purpura require the frequent repetition even of very large doses, whether by the mouth or by hypodermic injection; both methods may be combined.

9. Generally one or two grains of ergotin or from ten to fifteen minims of the fluid extract hypodermically, once or twice a day, are sufficient, but the former may be safely increased to five grains, and the latter to twenty or thirty minims, and repeated as often as every hour and a half.

10. Larger doses relatively are required when given by the mouth, and their action, thus given, is more slow.

11. No fear need be entertained of any untoward effect; an ounce of fluid extract by the mouth, and seven grains of ergotin hypodermically, have failed to give rise to any unpleasant symptoms; and from half a drachm

to a drachm and a half of the tincture or fluid extract have been continued for several months without producing ergotism.

12. Other preparations of ergot may be employed internally, as the powder, solid extract, wine, or infusion, the dose being proportioned to the effect required or produced.

THE COLD-BATH TREATMENT OF ENTERIC FEVER (*The Practitioner*, November, 1876).—Dr. John McCombie, after considering the use of cold baths in enteric fever and alluding to the remarkable statistics published by some of the German observers, concludes as follows: Whilst we are unable to give our assent to the opinion that cold water is omnipotent in the treatment of enteric fever, we consider it a valuable addition to the therapeutics of this disease. From the simplicity of its administration, from the absence of danger in its use in the majority of instances, and from the beneficial effect derived from the reduction of the temperature and the production of sleep, we think it is far from having attained that position among the therapeutics of this disease which it deserves, but we do not hesitate to affirm that there are other agents of great, and, in some cases and under certain conditions, of greater value, and that the treatment of enteric fever has not yet resolved itself, as certain German authorities would have us believe, into the use of the thermometer and the cold bath.

GOKHRU IN SEMINAL DISCHARGE AND INCONTINENCE OF URINE (*The Indian Medical Gazette*, July 1, 1876).—Cheytan Shah, Assistant-Surgeon to the City Dispensary, Peshawur, comes to the following conclusions in regard to gokhru: 1. It is useful in certain cases of premature discharge, and for certain forms of involuntary emission. 2. It entirely cures the moisture or dribbling that occurs from the orifice of the urethra shortly after micturition. 3. The effects are manifested in the course of a week. 4. In a few cases relapses occur. 5. A few patients complain of lassitude and a few of dryness of the mouth from its use. 6. It appears to have a marked effect upon irritability of the bladder and the prostatic region, and after its use urine can be retained in the bladder for a longer period.

PARACENTESIS IN PLEURISY FOLLOWED BY SUDDEN DEATH (*The Lancet*, November 4, 1876).—Dr. Broadbent reports a case of pleurisy in which tapping was followed by sudden death, which occurred three hours and a half after the operation. The patient was a shoemaker, 62 years of age, who, up to the time of his attack, had enjoyed good health, but had been in the habit of drinking beer freely. He was admitted into the hospital on January 21, suffering from pleuritic effusion on the left side, resulting from an attack of acute pleurisy weeks before. The onset of the attack was of the usual character. On admission there were signs of effusion nearly filling the left pleural cavity, the heart's apex

being displaced to the right of the sternum. The urine was free from albumen. The patient slept badly, and suffered from severe attacks of dyspnoea coming on in paroxysms. On January 26, at 2 P.M., paracentesis with the aid of the aspirator was performed, the puncture being made with a medium-sized needle between the seventh and eighth ribs, a short distance outside the angle of the scapula, the spot selected being rather farther out than usual on account of the presence of vocal fremitus farther back. Eighty ounces of nearly clear serum were withdrawn, with the results of relief to the breathing and partial return of the heart to its normal position. It was not attempted to remove all the fluid. At 3.30 the patient was doing well; at 5 he was cheerful, and said he felt better; he then had tea; at 5.45 he appeared to be quiet and was lying still, and on looking at him it was found that he was dead. The fatal issue might have been due to detachment of a clot or to syncope, but the post-mortem examination showed nothing to account for it except on the hypothesis of syncope. The left pleura contained a good deal of clear serum. The heart was large, its apex pushed to the left, the vessels twisted, its cavities empty, the left ventricle dilated, and the substance pale.

THE ASPIRATOR IN STRANGULATED HERNIA (*The Lancet*, September 2, 1876).—Dr. Henry Blane reports a case of strangulated inguinal hernia, in which all attempts at reduction by taxis failed utterly until an aspirator was introduced and an ounce of serum with a large quantity of gas withdrawn. The hernia then slipped back at once into the abdomen. The case went on to entire recovery.

SUCCESSFUL ABDOMINAL SECTION FOR EXTRA-UTERINE FŒTATION (*The Lancet*, November 4, 1876).—Mr. Thomas R. Jessop reports the first case of abdominal section for extra-uterine foetation in which the lives of mother and child have been preserved. Until within the last few years surgeons and obstetricians had an unreasonable dread of meddling in any way with the peritoneum, but the success that has attended the later performances of abdominal section for the removal of ovarian and abdominal tumors, and, more recently, for the relief of intussusception of the bowel, has produced quite a revolution of opinion. Campbell and Ramsbotham, the highest authorities of their day, condemned any attempt to save the child's life in cases of extra-uterine foetation, as the operation had been invariably fatal to the mother. Mr. Jessop has, however, advanced good reasons for departing in this instance from the decision of these writers. On account of vomiting and pain, the mother's life had been gradually ebbing away for months, and at the time of coming under observation she was almost *in extremis*; the child, on the other hand, exhibited signs of vigor and of strength. The removal of the foetus was ob-

viously the only possible means of saving the life of the woman, and did not appear to offer any great risk to the child itself. The operation, which was facilitated by the case being of the abdominal variety, was accordingly performed, and both mother and child were saved. Much stress is very properly laid by Mr. Jessop on the after-treatment he pursued. The placenta which covered the inlet of the pelvis was left *in situ*, to come away subsequently by disintegration through an opening left in the lower part of the abdominal incision. The child grew and prospered for eleven months, but was then seized with croup and inflammation of the lungs, of which it died within a week. The case is interesting in many respects, but whether it will serve as a safe precedent must depend on future experience.

GELSEMINUM SEMPERVIRENS (*The Lancet*, October 21, 1876).—Dr. Sydney Ringer, after considering various effects of gelseminum upon man and the lower animals, comes to the following conclusions:

1. That gelseminum produces but little, if any, effect on the pulse.
2. That it does not affect the blood-pressure.
3. That in man it probably acts on the respiratory centre less energetically than in the lower animals.
4. That in man it acts on the muscles of the eye, and produces other symptoms before it influences the respiratory centre.
5. That in man it in all probability affects the spinal cord before the respiratory centre.
6. That it exerts no influence on the mind, and none on the cutaneous sensibility.
7. That it does not affect the temperature.

RADICAL CURE OF HYDROCELE WITH INJECTION OF CARBOLIC ACID (*New York Medical Journal*, November, 1876).—Instead of the customary puncture and subsequent injection with tincture of iodine, which always produces pain and confines the patient to bed for some days, Prof. Hüter has tried and highly recommends an injection of carbolic acid, two per cent. In one case there was no pain whatever, either during or after the operation; the patient took a walk immediately after, and was not confined to his house. On the fifth day there was no swelling nor tenderness, and the hydrocele could be considered cured.

CALABAR BEAN AS A LACTAGOGUE (*The British Medical Journal*, October 18, 1876).—Dr. W. Munro, remembering the power of calabar bean to dilate the peripheral blood-vessels, and wishing to restore the secretion of milk after it had disappeared from the breast for about three days, thought this dilating power might be made useful. He accordingly prepared an ointment of the strength of twenty grains to the ounce, and ordered it to be applied, and washed off carefully before the baby was allowed to suckle. After two applications, *the baby not having been put to the breast meanwhile*, the milk returned in full flow.

MISCELLANY.

SPIRIT-DRINKING IN PERU.—The first census of Peru since it ceased to be a Spanish colony has just been taken. The late President, Don Manuel Pardo, was its proposer. It discloses an awful mortality from spirit-drinking. According to this new numbering of the people the population amounts to 2,720,735, a fearful falling-off, which is accounted for by earthquakes, diseases, civil war, and "brandy." This last has, it appears, killed its tens of thousands, and it may be fairly assumed that the result of this increase of national drunkenness will be the superseding of the present race of Peruvians by the Chinese and the Mormons.—*Medical Examiner*.

AN ITEMIZED BILL.—Nélaton was stopped in Paris to restore to their place several feet of the intestines of a wounded man. This man, when well, called for his bill. He was told that it was five hundred francs. Being a merchant, he asked for an itemized bill. Nélaton seized his pen and wrote as follows: "For restoring five feet of intestine at one hundred francs a foot—five hundred francs." The merchant was satisfied and paid the account.—*The Clinic*.

NOTES AND QUERIES.

November 16, 1876.

MR. EDITOR,—DEAR SIR,—Having been quite interested in the articles in your valuable journal on "Diphtheria," allow me to suggest as a local remedy peppermint. I use the (candy) drops, let them dissolve slowly in the mouth, as many as required to keep up the impression of cold at each inspiration. I speak from personal experience as well as several years' trial in practice. The easy administration, especially to children, the instantaneous and marked relief which it affords, make me believe it a valuable adjunct to our local remedies; in fact, I use it in all diseases of the throat where there is a hyperæmic condition, and through an epidemic of scarlatina, and in all cases with equally good results.

W. L. MCKIBBIN, M.D.

BARK VALLEY, FULTON CO., PA.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM NOVEMBER 5, 1876, TO NOVEMBER 18, 1876, INCLUSIVE.

CLEMENTS, B. A., SURGEON.—To rejoin his station at Fort Sanders without delay. S. O. 146, Department of the Platte, October 30, 1876.

FORWOOD, W. H., SURGEON.—Assigned to duty temporarily in office of Medical Director of the Department. S. O. 165, Department of the South, November 4, 1876.

DE GRAW, C. S., ASSISTANT-SURGEON.—Granted leave of absence for four months. S. O. 231, A. G. O., November 4, 1876.

HALL, J. D., ASSISTANT-SURGEON.—Assigned to temporary duty at Summerville, S. C. S. O. 164, Department of the South, November 4, 1876.

REED, W., ASSISTANT-SURGEON.—Leave of absence extended one month. S. O. 154, Military Division Pacific, and Department of California, November 8, 1876.